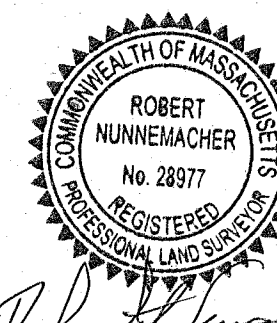


KEY	
	WETLAND EDGE
	100' BUFFER ZONE EDGE
	CATCHBASIN
	FLARED END SECTION
	EXISTING UNDERGROUND
	DRAIN OR SEWER PIPE
	WATER GATE
	HYDRANT
	SIDEWALK
	HANDICAPPED RAMP
	PROP. EDGE OF PAVEMENT
	PROP. CONCRETE MONUMENT
	UTILITY POLE
	POLE WITH LIGHT
	OVERHEAD WIRES
	2' CONTOUR
	10' CONTOUR
	PROPOSED CONTOUR
	EXISTING SPOT GRADE
	PROPOSED SPOT GRADE
	STONE WALL
	DEEP HOLE TEST
	TOWN BYLAW 25' NO DISTURB BUFFER ZONE

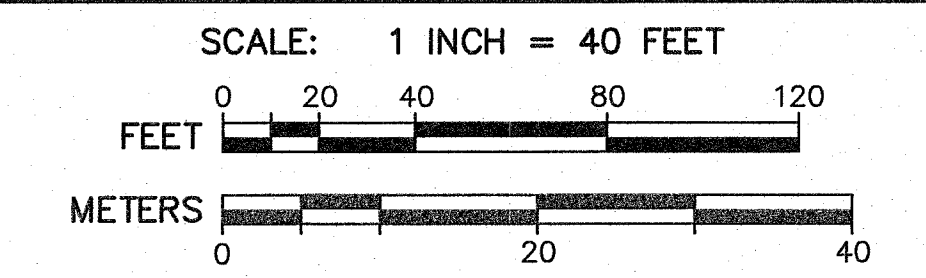
NOTES:
1) WETLAND BOUNDARIES SHOWN ARE THOSE CONFIRMED UNDER THE ORDER OF CONDITIONS ISSUED UNDER DEP FILE #164-0931 ON MARCH 9, 2017 AND RECORDED AT BOOK 56879 PAGE 280 IN THE WORCESTER DISTRICT REGISTRY OF DEEDS.
2) UPLAND AREAS HAVE BEEN PREVIOUSLY ALTERED TO THE WETLAND LINE FROM THE FENCE AROUND THE PLAYING FIELD SOUTH TO THE EXISTING 12" DRAINAGE DISCHARGE.



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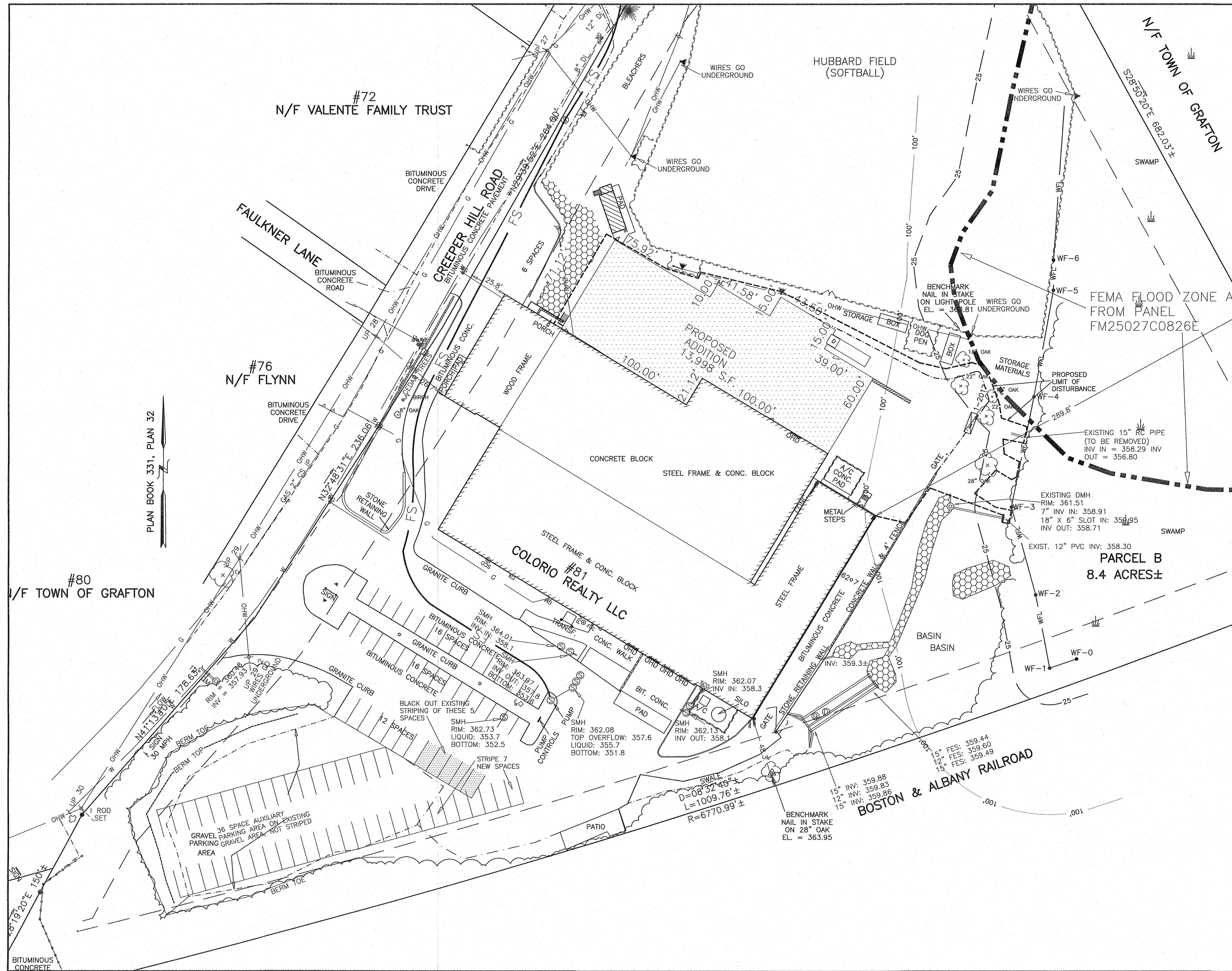
CLT. NO.	2010	JOB NO.	110-1216
DATE:	AUGUST 8, 2017	DWG. NO.	DIMITRIADDITIONCURRENT

REVISIONS	
DATE:	DESCRIPTION
8/21/17	ADDED 25' BUFFER AND LIMIT OF WORK



SITE PLAN FOR BUILDING ADDITION
EXISTING CONDITIONS PLAN
AT 81 CREEPER HILL ROAD
IN
GRAFTON, MASS.

OWNER AND APPLICANT:
COLORIO REALTY LLC
81 CREEPER HILL ROAD
GRAFTON, MA 01536



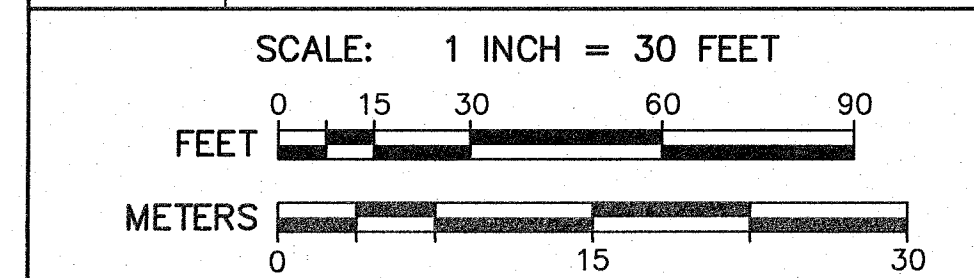
KEY	
WFL	WETLAND EDGE
100'	100' BUFFER ZONE EDGE
⊙	DRAIN MANHOLE
⊞	CATCHBASIN
—	FLARED END SECTION
—	EXISTING UNDERGROUND
—	DRAIN OR SEWER PIPE
—	WATER GATE
—	HYDRANT
—	SIDEWALK
—	HANDICAPPED RAMP
—	PROP. EDGE OF PAVEMENT
—	PROP. CONCRETE MONUMENT
—	UTILITY POLE
—	POLE WITH LIGHT
—	OVERHEAD WIRES
—	2' CONTOUR
—	10' CONTOUR
362	PROPOSED CONTOUR
362.07	EXISTING SPOT GRADE
361.80	PROPOSED SPOT GRADE
—	STONE WALL
—	DEEP HOLE TEST
25	TOWN BYLAW 25' NO DISTURB BUFFER ZONE
—	PROPOSED SPLIT RAIL FENCE

FEMA FLOOD ZONE A FROM PANEL FM25027C0826E

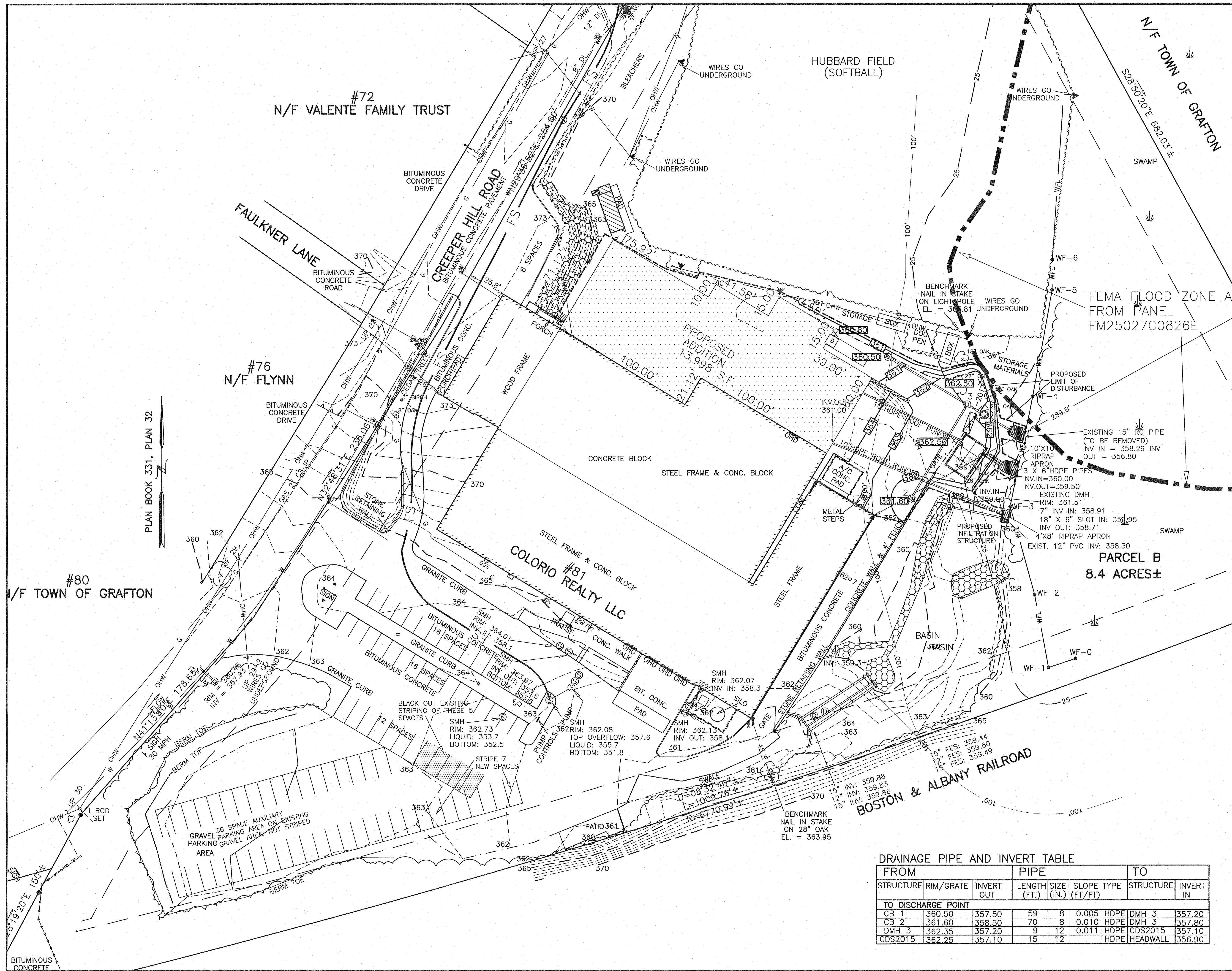
THOMPSON-LISTON ASSOCIATES, INC.
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51 MAIN STREET, PO BOX 570
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CLT. NO. 2010 JOB NO. 110-1216
DATE: AUGUST 8, 2017 DWG. NO. DIMITRIADDITIONCURRENT

REVISIONS	
DATE	DESCRIPTION
8/21/17	ADDED 25' BUFFER AND LIMIT OF WORK



SITE PLAN FOR BUILDING ADDITION
SITE LAYOUT PLAN
AT 81 CREEPER HILL ROAD
IN
GRAFTON, MASS.
OWNER AND APPLICANT:
COLORIO REALTY LLC
81 CREEPER HILL ROAD
GRAFTON, MA 01536



KEY

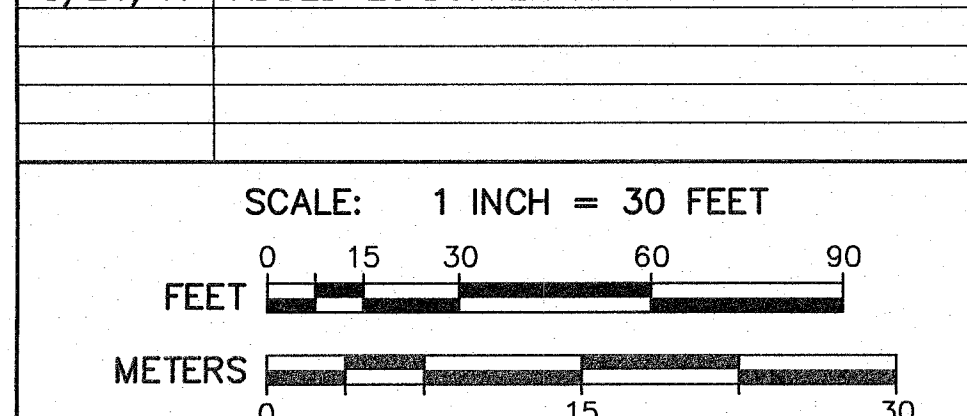
WFL	WETLAND EDGE
100'	100' BUFFER ZONE EDGE
⊕	DRAIN MANHOLE
⊕	CATCHBASIN
⊕	FLARED END SECTION
⊕	EXISTING UNDERGROUND DRAIN OR SEWER PIPE
⊕	WATER GATE
⊕	HYDRANT
⊕	SIDEWALK
⊕	HANDICAPPED RAMP
⊕	PROP. EDGE OF PAVEMENT
⊕	PROP. CONCRETE MONUMENT
⊕	UTILITY POLE
⊕	POLE WITH LIGHT
⊕	OVERHEAD WIRES
⊕	2' CONTOUR
⊕	10' CONTOUR
⊕	PROPOSED CONTOUR
⊕	EXISTING SPOT GRADE
⊕	PROPOSED SPOT GRADE
⊕	STONE WALL
⊕	DEEP HOLE TEST
⊕	TOWN BYLAW 25' NO DISTURB BUFFER ZONE
⊕	PROPOSED SPLIT RAIL FENCE

FEMA FLOOD ZONE A FROM PANEL FM25027C0826E

THOMPSON-LISTON ASSOCIATES, INC.
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CLT. NO. 2010 JOB NO. 110-1216
DATE: AUGUST 8, 2017 DWG NO. DIMITRIAADDITIONCURRENT

DATE	REVISIONS
8/21/17	ADDED 25' BUFFER AND LIMIT OF WORK

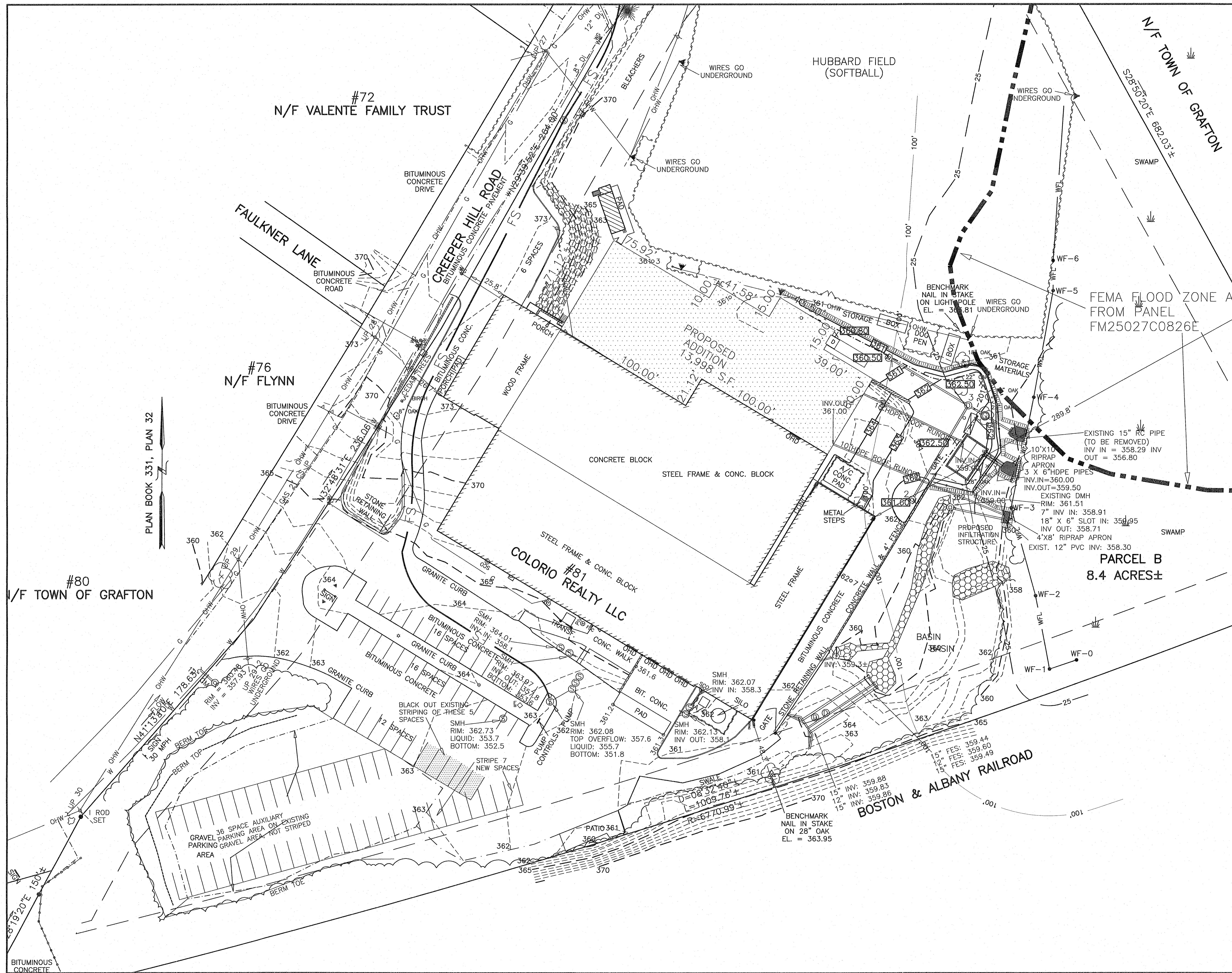


SITE PLAN FOR BUILDING ADDITION
GRADING PLAN
AT 81 CREEPER HILL ROAD
IN
GRAFTON, MASS.

OWNER AND APPLICANT:
COLORIO REALTY LLC
81 CREEPER HILL ROAD
GRAFTON, MA 01536

DRAINAGE PIPE AND INVERT TABLE

FROM			PIPE				TO	
STRUCTURE	RIM/GRATE	INVERT OUT	LENGTH (FT.)	SIZE (IN.)	SLOPE (FT/FT)	TYPE	STRUCTURE	INVERT IN
TO DISCHARGE POINT								
CB 1	360.50	357.50	59	8	0.005	HDPE	DMH 3	357.20
CB 2	361.60	358.50	70	8	0.010	HDPE	DMH 3	357.80
DMH 3	362.35	357.20	9	12	0.011	HDPE	CDS2015	357.10
CDS2015	362.25	357.10	15	12		HDPE	HEADWALL	356.90



KEY	
WFL	WETLAND EDGE
100'	100' BUFFER ZONE EDGE
⊙	DRAIN MANHOLE
⊞	CATCHBASIN
FLARED END SECTION	FLARED END SECTION
EXISTING UNDERGROUND	EXISTING UNDERGROUND
DRAIN OR SEWER PIPE	DRAIN OR SEWER PIPE
WATER GATE	WATER GATE
HYDRANT	HYDRANT
SIDEWALK	SIDEWALK
HANDICAPPED RAMP	HANDICAPPED RAMP
PROP. EDGE OF PAVEMENT	PROP. EDGE OF PAVEMENT
PROP. CONCRETE MONUMENT	PROP. CONCRETE MONUMENT
UTILITY POLE	UTILITY POLE
POLE WITH LIGHT	POLE WITH LIGHT
OVERHEAD WIRES	OVERHEAD WIRES
2' CONTOUR	2' CONTOUR
10' CONTOUR	10' CONTOUR
362	PROPOSED CONTOUR
362.07	EXISTING SPOT GRADE
361.80	PROPOSED SPOT GRADE
STONE WALL	STONE WALL
PROPOSED EROSION CONTROL	PROPOSED EROSION CONTROL
BARRIER	BARRIER
DEEP HOLE TEST	DEEP HOLE TEST
25	TOWN BYLAW 25' NO
*	DISTURB BUFFER ZONE
*	PROPOSED SPLIT RAIL FENCE

NOTE:
SOIL STOCKPILES SHALL BE KEPT AS FAR AS POSSIBLE FROM WETLAND RESOURCES AREAS AND SHALL BE SURROUNDED, WITH A 5' SEPARATION, AT THEIR BASE BY EROSION CONTROL BARRIERS.

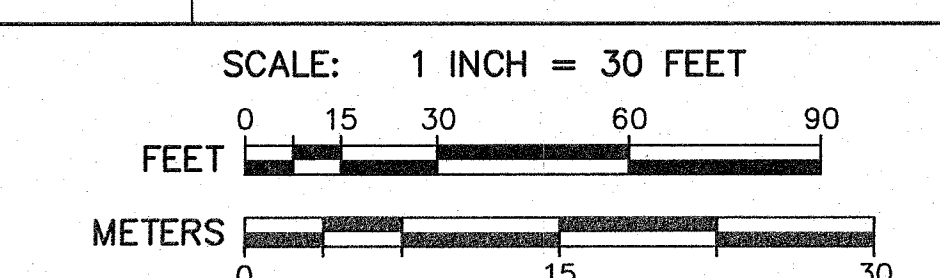


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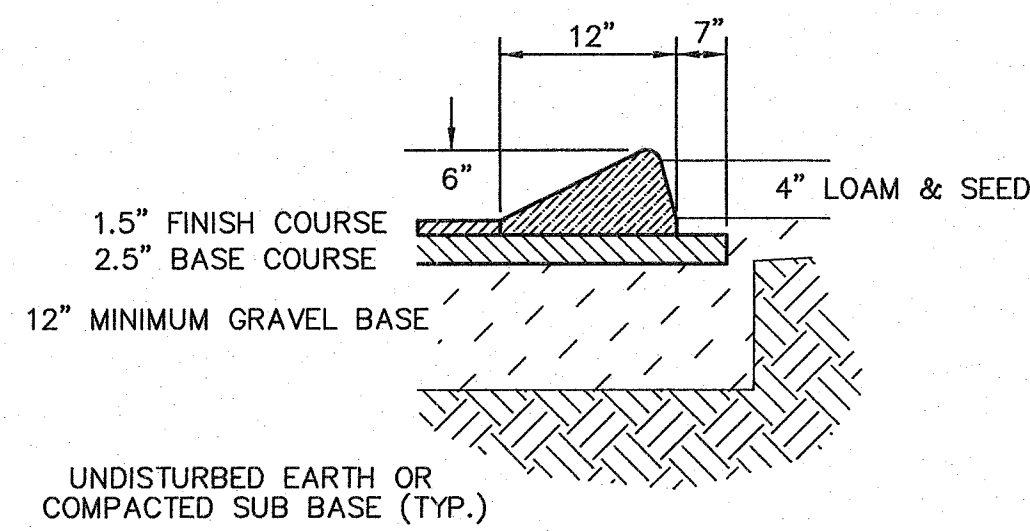
DATE: AUGUST 8, 2017 DWG. NO. DIMITRIADDITIONCURRENT

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DATE:	DESCRIPTION
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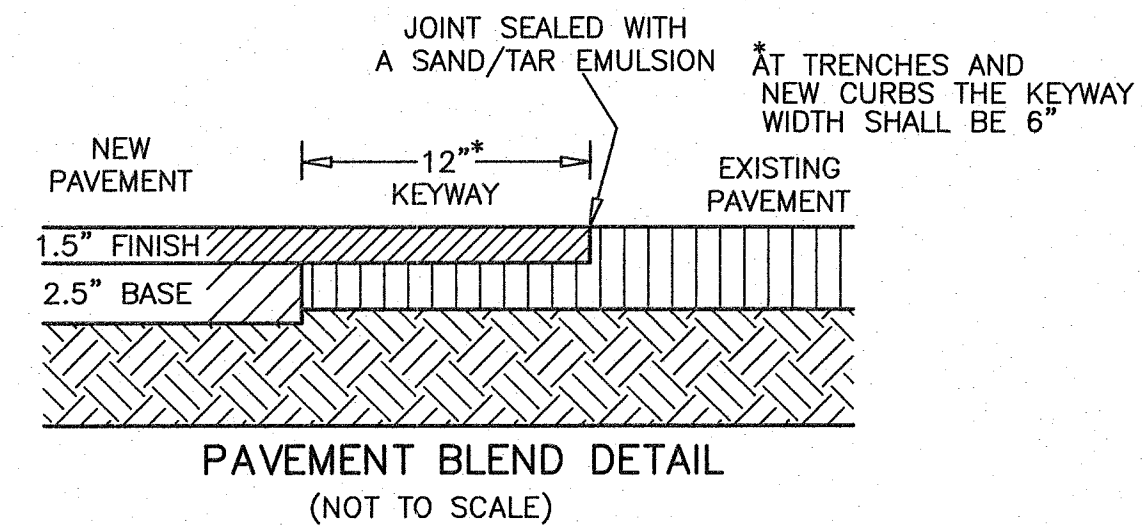


SITE PLAN FOR BUILDING ADDITION
EROSION & SEDIMENT CONTROL PLAN
AT 81 CREEPER HILL ROAD
IN
GRAFTON, MASS.

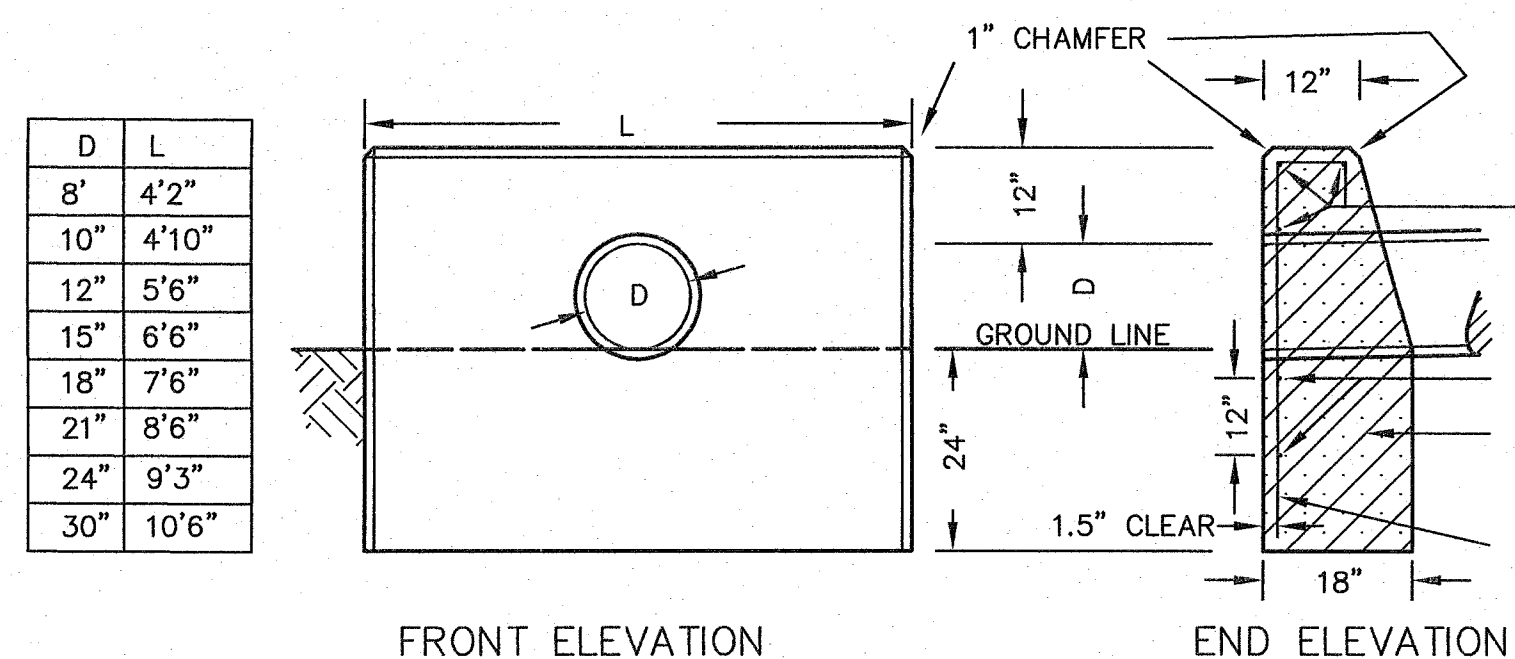
OWNER AND APPLICANT:
COLORIO REALTY LLC
81 CREEPER HILL ROAD
GRAFTON, MA 01536



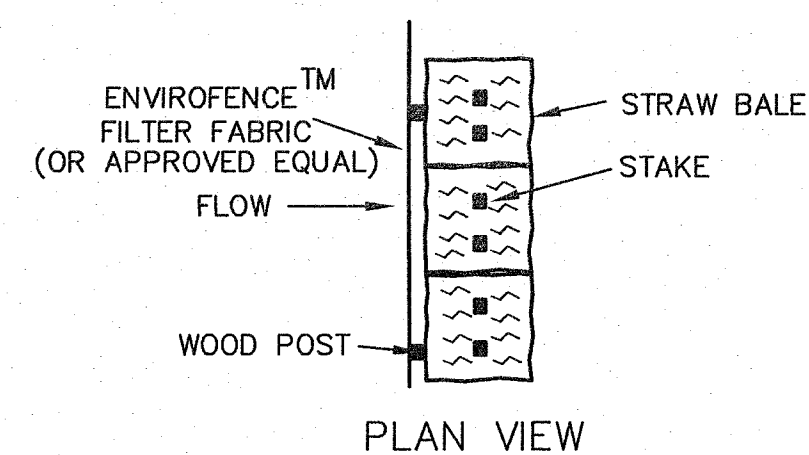
BITUMINOUS CONCRETE "CAPE COD" BERM
(NOT TO SCALE)



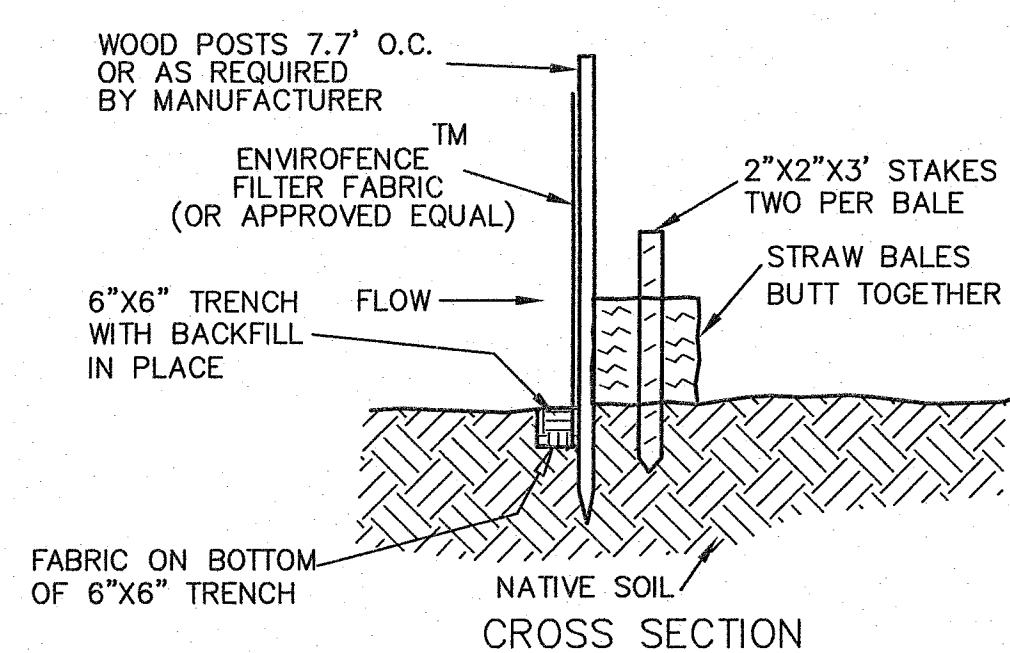
PAVEMENT BLEND DETAIL
(NOT TO SCALE)



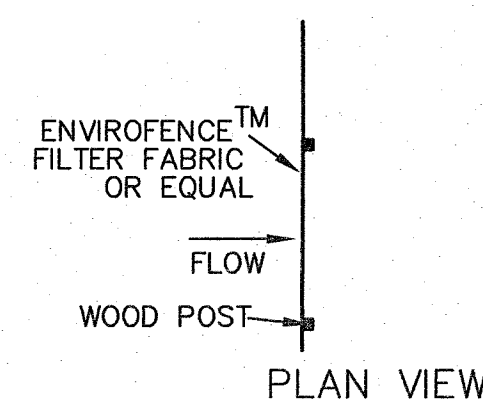
FRONT ELEVATION
HEADWALL
(NOT TO SCALE)



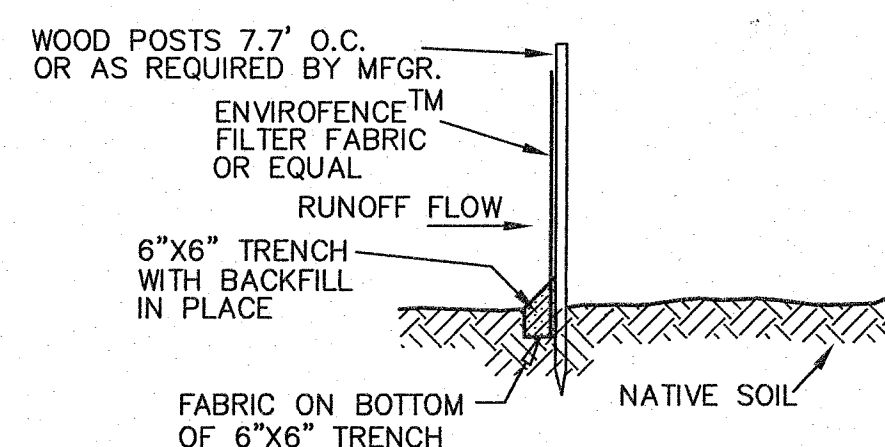
PLAN VIEW



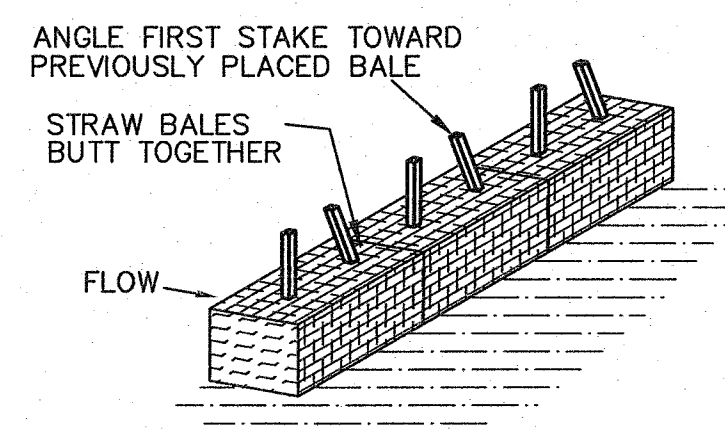
EROSION CONTROL BARRIER
(NOT TO SCALE)



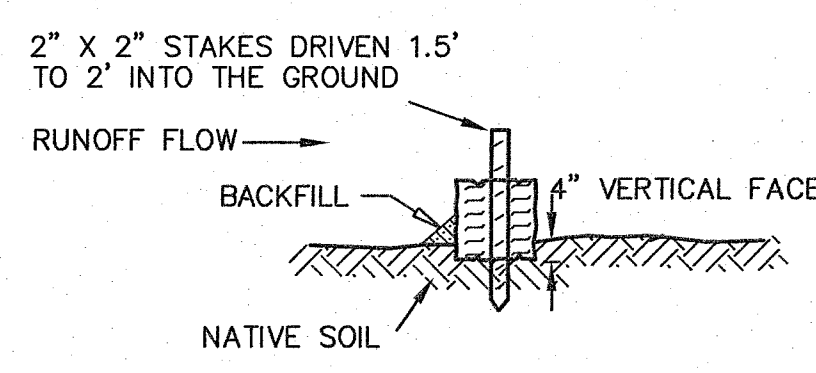
PLAN VIEW



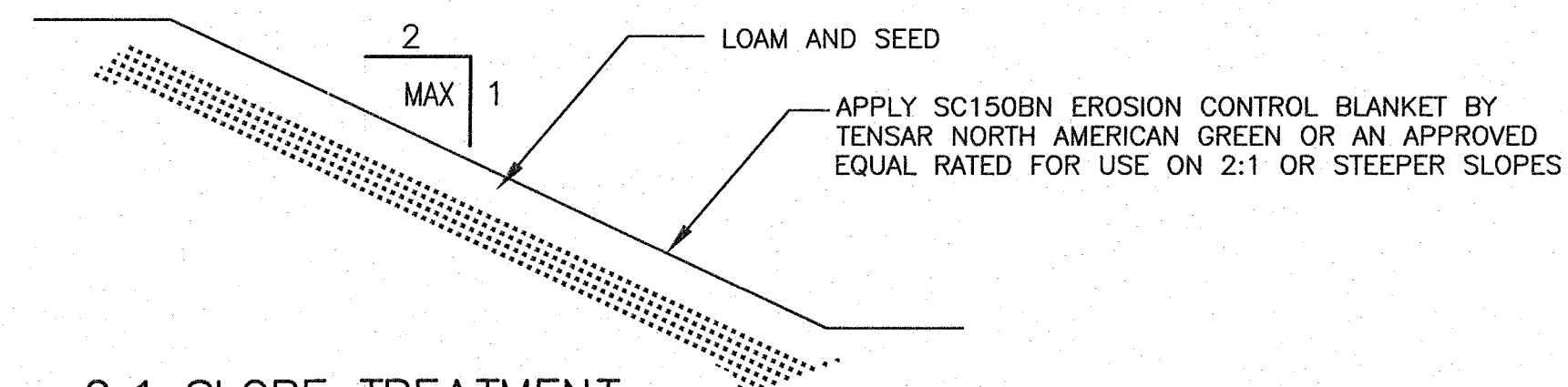
CROSS SECTION
SILTA FENCE
(NOT TO SCALE)



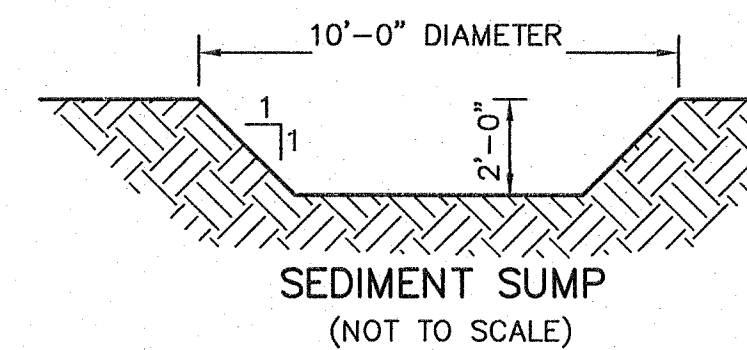
ANCHORING DETAIL



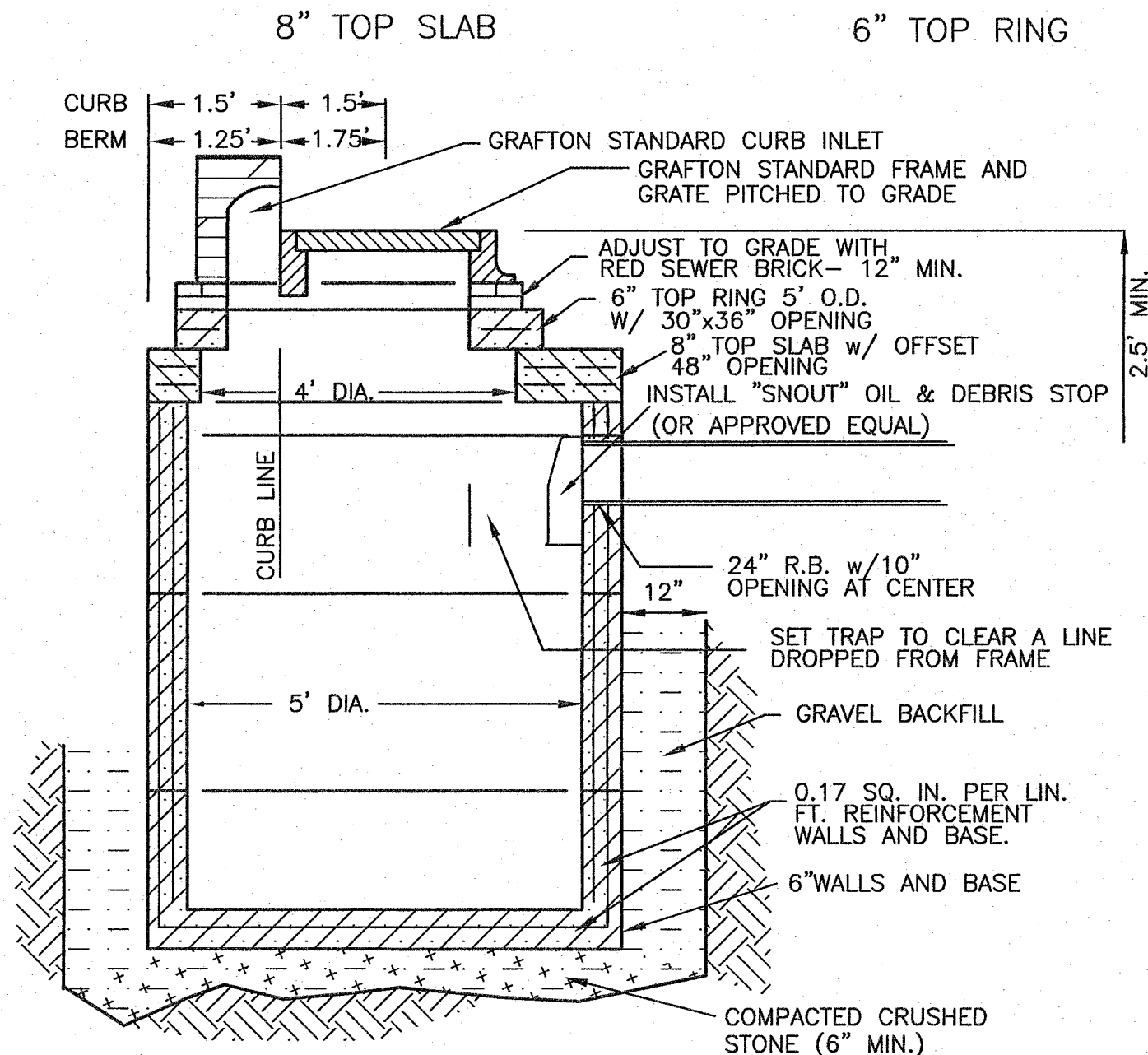
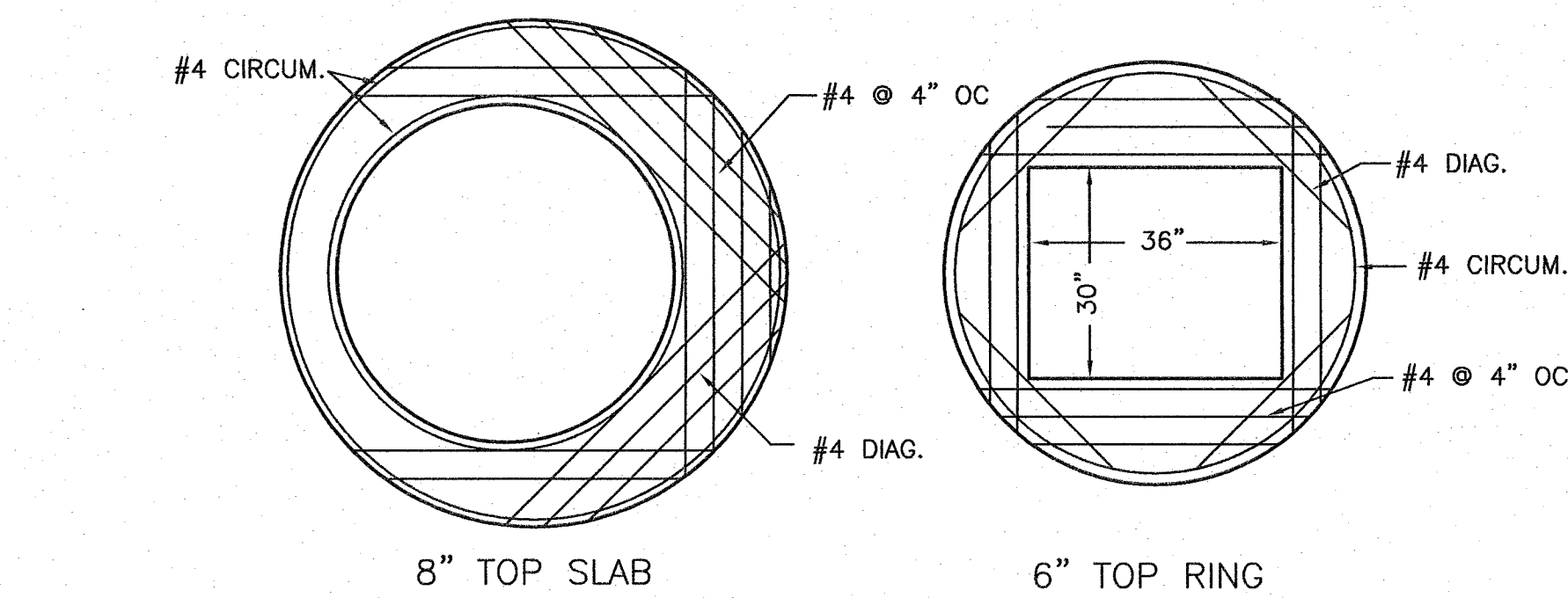
EMBEDDING DETAIL
STRAW BALE DIKE
(NOT TO SCALE)



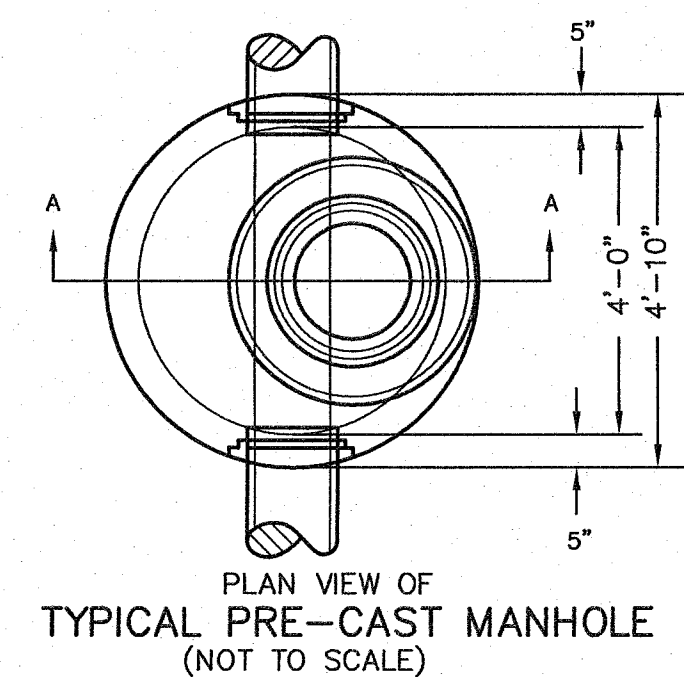
2:1 SLOPE TREATMENT
(NOT TO SCALE)



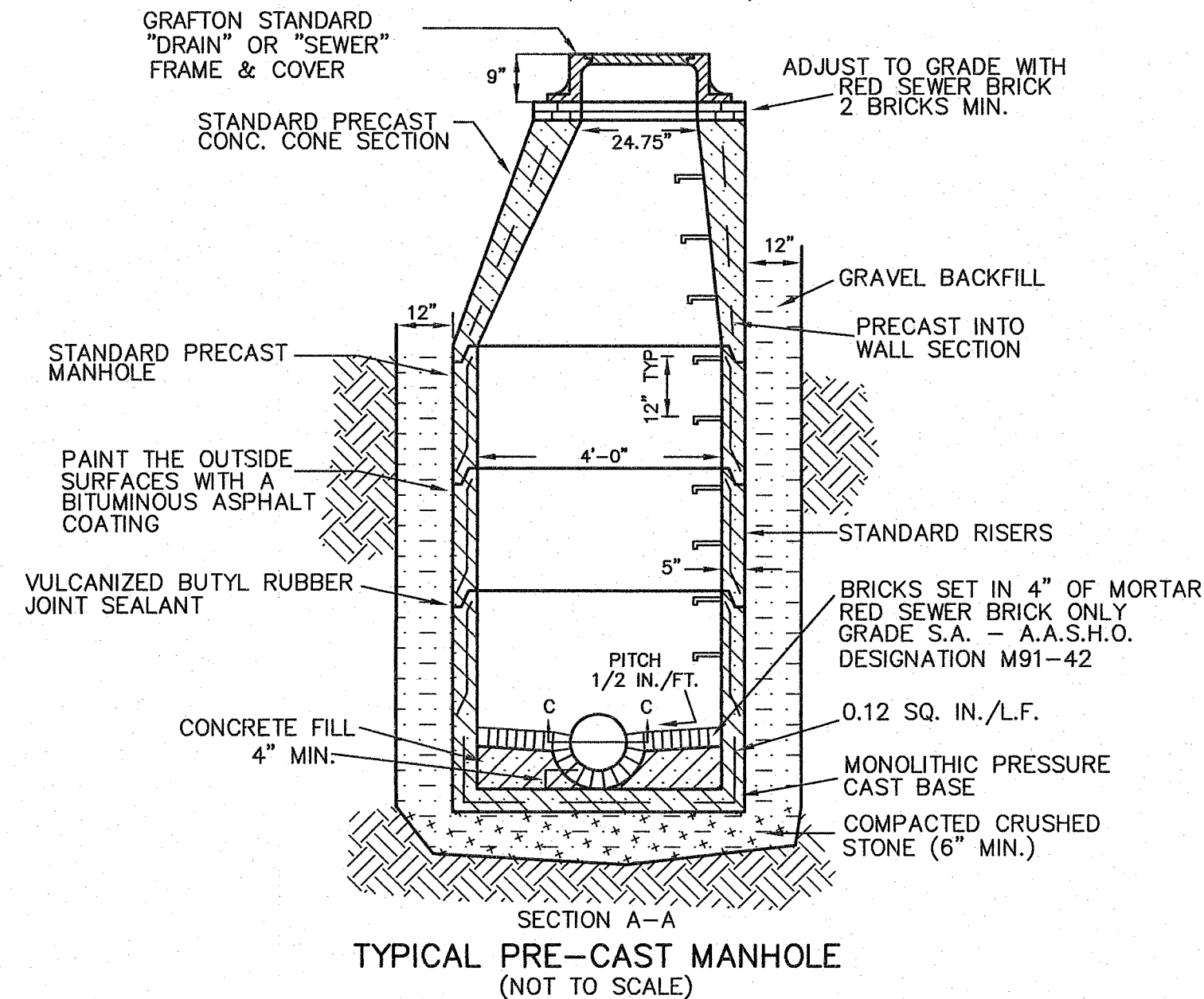
SEDIMENT SUMP
(NOT TO SCALE)



TYPICAL PRE-CAST CATCH BASIN
(NOT TO SCALE)



TYPICAL PRE-CAST MANHOLE
(NOT TO SCALE)



TYPICAL PRE-CAST MANHOLE
(NOT TO SCALE)

NOTES:

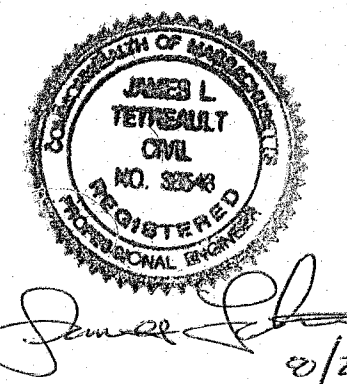
1) JAMES TETREAULT, PE, SE#2421, WITNESSED SOIL TEST 1-2017 ON 7-21-17. THERE WAS 5' OF FILL OVER A SAND TEXTURED NATURAL SOIL WITH WEEPING AT 60 INCHES DETERMINING SEASONAL HIGH GROUNDWATER. THERE WAS NO MOTTLING ABOVE THAT HEIGHT.

2) THE PROPOSED STORMWATER FILTRATION UNIT TO RECEIVE DISCHARGE FROM BOTH PROPOSED CATCH BASINS THROUGH DMH 3, IS A CONTECH CDS UNIT MODEL 2015.

3) THE PROPOSED 30' LONG RETAINING WALL WILL HAVE A MAXIMUM HEIGHT OF 3 FEET.

DIG SAFE:

EXCEPT FOR VISIBLE STRUCTURES (MANHOLES, GATES, POLES, ETC.) LOCATED BY THOMPSON-LISTON ASSOCIATES, INC., ALL UNDERGROUND UTILITIES SHOWN WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS FROM THE VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD BEFORE DESIGNING, EXCAVATING, BLASTING OR INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORATION, OR REPAIRING. ALL UTILITY COMPANIES, PUBLIC & PRIVATE, MUST BE CONTACTED, INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN. THOMPSON-LISTON ASSOCIATES, INC. ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. CALL "DIG SAFE" AT 811 OR 1-888-DIG-SAFE.



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CIVIL ENGINEERS & LAND SURVEYORS
51 MAIN STREET, PO BOX 570
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CLT. NO.	2010	JOB NO.	110-1216
DATE:	AUGUST 8, 2017	DWG NO.	DIMITRIADDITIONCURRENT
REVISIONS			
DATE:	8/21/17	DESCRIPTION	ADDED 25' BUFFER AND LIMIT OF WORK

NO SCALE

SITE PLAN FOR BUILDING ADDITION
DETAIL PLAN
AT 81 CREEPER HILL ROAD
IN
GRAFTON, MASS.

OWNER AND APPLICANT:
COLORIO REALTY LLC
81 CREEPER HILL ROAD
GRAFTON, MA 01536

ZONING COMPLIANCE TABLE

THE SITE IS LOCATED IN THE OFFICE/LIGHT INDUSTRIAL ZONING DISTRICT. THE FOLLOWING TABLE COMPARES THE ZONING REQUIREMENTS AND DIMENSIONS PROPOSED AT THIS SITE:

DIMENSION	REQUIREMENT	EXISTING	PROPOSED
MIN. LOT AREA	40,000 S.F.	364,682 S.F.	364,682 S.F.
MIN. FRONTAGE	120'	1,106.83'	1,106.83'
MIN. FRONT YARD	40'	25.8'	25.8'*
MIN. SIDE YARD	35'	289.8'	246.3'
MIN. REAR YARD	35'	48.3'	48.3'
MAX. BLDG COVERAGE(%)	40%	12.6%	16.4%
MAX. HEIGHT (FEET)	35'	26.7'	26.7'

*THE PROPOSED ADDITION WILL HAVE A FRONT YARD SETBACK OF 71.1 FEET.

PARKING CALCULATION

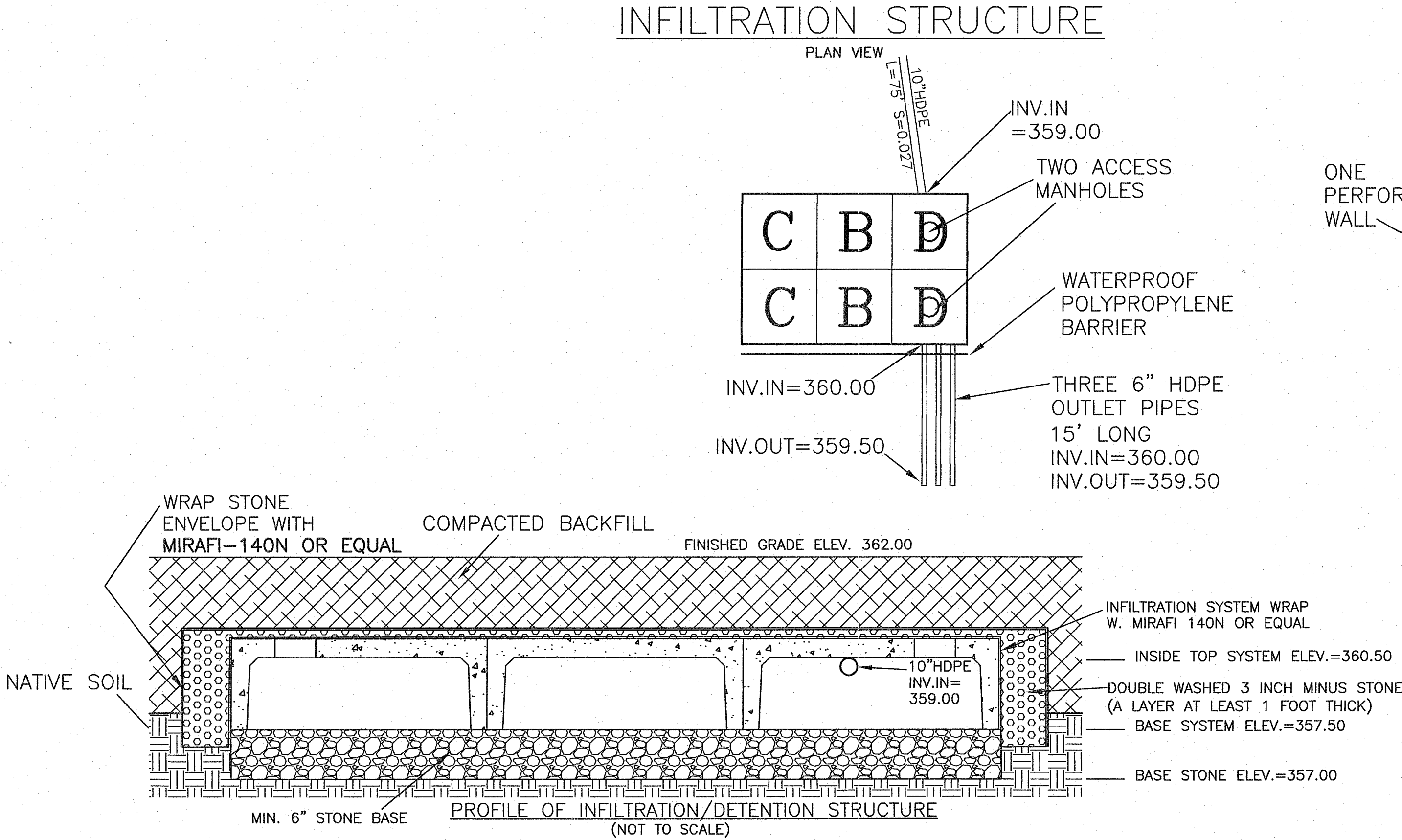
PER SECTION 4.2 OF THE GRAFTON ZONING BYLAW, THE REQUIREMENTS FOR THE PROVISION OF OFF STREET PARKING SPACES ARE AS FOLLOWS:

TYPE OF USE	REQUIREMENT	PROPOSED FACILITY	# OF SPACES NEEDED
MANUFACTURING	1 SPACE PER 500 S.F.	56,170 S.F.	112.3
OFFICE	1 SPACE PER 150 S.F.	3,600 S.F. (UNCHANGED)	24

THE FACILITY WILL PROVIDE A TOTAL OF 91 PARKING SPACES(67% OF REQUIREMENT), BRINGING IT CLOSER TO COMPLIANCE THAN IT IS AT PRESENT. THE EXISTING FACILITY, WITH 42,172 S.F. OF MANUFACTURING SPACE AND 3,600 S.F. OF OFFICE SPACE HAS A REQUIREMENT FOR (84+24) 108 PARKING SPACES UNDER THE BYLAW AND 56 SPACES (52% OF REQUIREMENT) ARE PROVIDED.

NOTES:

- ALL WORK SHALL CONFORM TO THE STANDARDS OF THE TOWN OF GRAFTON.
- VARIOUS STACKED MATERIALS IN THE AREA OF THE PROPOSED INFILTRATION STRUCTURE SHALL BE MOVED TO OTHER AREAS OF THE SITE AS WELL AS THE STORAGE BOX.
- PLACE 4" OF LOAM AND SEED ALL DISTURBED AREAS OF THE PROJECT NOT OTHERWISE IMPROVED.
- ALL ELEVATIONS REFER TO THE 1988 DATUM.

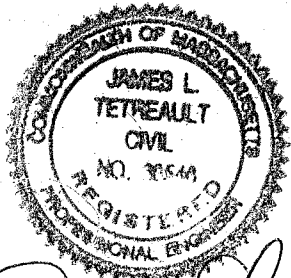
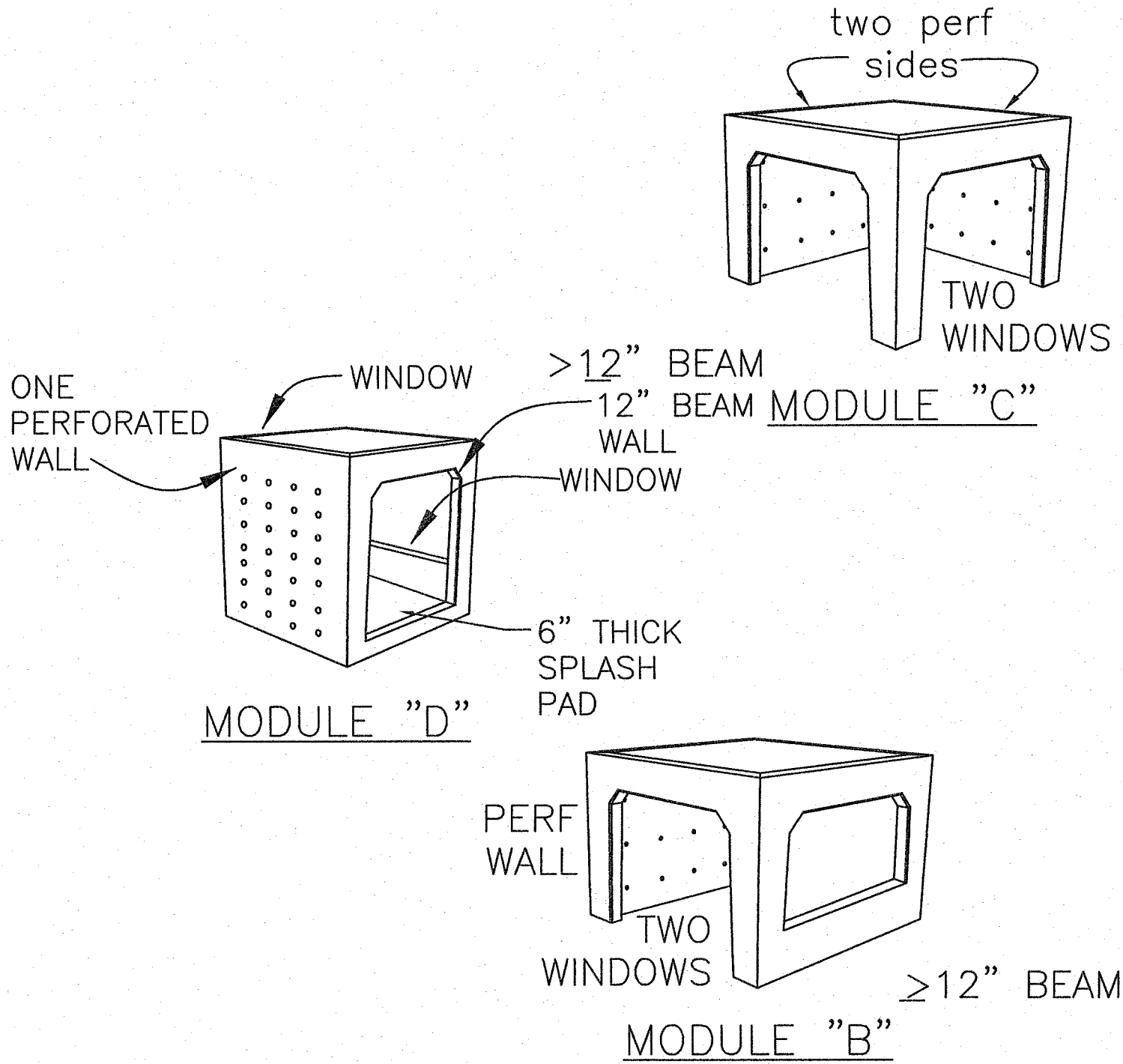


THE DETENTION/INFILTRATION STRUCTURE SHALL CONSIST OF SIX ARROW CONCRETE RETAIN-IT CONCRETE MODULES (OR APPROVED EQUAL) INSTALLED TO CREATE A STRUCTURE WITH AN OVERALL SIZE OF 26 FEET LONG AND 18 FEET WIDE WITH AN INSIDE HEIGHT OF 3 FEET. THE UNITS SHALL BE OPEN BOTTOMED EXCEPT FOR THE MODULE AT THE INLET STRUCTURE WHICH SHALL HAVE A FLOOR TO ALLOW FOR POSSIBLE ADDITIONAL CLEANOUT. THERE SHALL BE ONE FOOT OF CRUSHED STONE SURROUNDING THE INFILTRATION STRUCTURE ON ALL SIDES AND 6 INCHES BELOW.

THE INFILTRATION STRUCTURE WILL RECEIVE DISCHARGE OF ROOF RUNOFF FROM 12,000 S.F. OF ROOF AREA OF THE NEW BUILDING ADDITION.

ANY FILL MUST BE REMOVED FROM BENEATH THE INFILTRATION STRUCTURE BEFORE STONE IS PLACED BENEATH THE UNITS.

A VORT SENTRY HS CATCH BASIN FIVE FEET AWAY WILL DISCHARGE INTO THE STRUCTURE WITH THE INVERT IN ELEVATION OF A 12 INCH HDPE DISCHARGE PIPE BEING 479.0. THERE SHALL BE A 10 INCH HDPE DISCHARGE PIPE DISCHARGING TO THE EAST AT AN INVERT OUT ELEVATION OF 479.17. 28 FEET AWAY THAT DISCHARGE PIPE SHALL DISCHARGE AT INVERT OUT ELEVATION OF 478.00 JUST ABOVE THE EXISTING CATCH BASIN AT THE PROPERTY LINE BETWEEN THIS LOT AND THE ABUTTER STAVROS.



James L. Tremault
8/21/2017

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REVISIONS	
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8/21/17	ADDED 25' BUFFER AND LIMIT OF WORK

NO SCALE

SITE PLAN FOR BUILDING ADDITION
DETAIL PLAN
AT 81 CREEPER HILL ROAD
IN
GRAFTON, MASS.

OWNER AND APPLICANT:
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